Project Title	Funding	Institution
Dysregulation of protein synthesis in fragile X syndrome	$1,089,880	National Institutes of Health
Longitudinal MRI study of brain development in fragile X	$748,506	Stanford University
MRI biomarkers of patients with tuberous sclerosis complex and autism	$720,276	Boston Children's Hospital
A family-genetic study of autism and fragile X syndrome	$593,966	Northwestern University
Genotype-phenotype relationships in fragile X families	$565,457	University of California, Davis
A longitudinal MRI study of brain development in fragile X syndrome	$549,582	University of North Carolina at Chapel Hill
Language development in fragile X syndrome	$509,862	University of California, Davis
Dysregulation of mTOR signaling in fragile X syndrome	$467,760	Albert Einstein College of Medicine of Yeshiva University
BDNF and the restoration of synaptic plasticity in fragile X and autism	$449,134	University of California, Irvine
Role of MEF2 and neural activity in cortical synaptic weakening and elimination	$415,385	University of Texas Southwestern Medical Center
New approaches to local translation: SpaceSTAMP of proteins synthesized in axons	$401,927	Dana-Farber Cancer Institute
Astrocyte function in genetic mouse models of autism spectrum disorders	$394,063	Cleveland Clinic Lerner College of Medicine, Case Western Reserve University
Mechanisms of mGluR5 function and dysfunction in mouse autism models	$393,841	University of Texas Southwestern Medical Center
Synaptic phenotype, development, and plasticity in the fragile X mouse	$379,329	University of Illinois at Urbana Champaign
Genetic and developmental analyses of fragile X mental retardation protein	$378,771	Vanderbilt University Medical Center
Translation, synchrony, and cognition	$375,588	New York University
Allelic choice in Rett syndrome	$374,862	Winifred Masterson Burke Medical Research Institute
Neurobiological mechanism of 15q11-13 duplication autism spectrum disorder	$367,304	Beth Israel Deaconess Medical Center
Role of Sema7A in functional organization of neocortex	$366,120	Mount Sinai School of Medicine
Translational regulation of adult neural stem cells	$359,977	University of Wisconsin - Madison
Genetically defined stem cell models of Rett and fragile X syndrome	$350,000	Whitehead Institute for Biomedical Research
Mesocorticolimbic dopamine circuitry in mouse models of autism	$349,295	Stanford University
The role of MeCP2 in Rett syndrome	$344,213	University of California, Davis
Emergence and stability of autism in fragile X syndrome	$343,680	University of South Carolina
The microRNA pathway in translational regulation of neuronal development	$340,304	University of Massachusetts Medical School
Olfactory abnormalities in the modeling of Rett syndrome	$339,270	Johns Hopkins University
Revealing protein synthesis defects in fragile X syndrome with new chemical tools	$337,091	Stanford University
MeCP2 modulation of BDNF signaling: Shared mechanisms of Rett and autism	$303,067	University of Alabama at Birmingham
Predicting phenotypic trajectories in Prader-Willi syndrome	$294,904	Vanderbilt University Medical Center
Mechanisms of motor skill learning in the fragile X mouse model	$292,423	University of Nebraska Medical Center
Fragile X syndrome target analysis and its contribution to autism	$259,025	Vanderbilt University
The role of UBE3A in autism	$250,001	Harvard Medical School

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Multigenic basis for autism linked to 22q13 chromosomal region	$250,000	Hunter College of the City University of New York (CUNY) jointly with Research Foundation of CUNY
Probing synaptic receptor composition in mouse models of autism	$249,995	Boston Children's Hospital
Presynaptic Fragile X Proteins	$249,000	Drexel University
Novel candidate mechanisms of fragile X syndrome	$249,000	University of Michigan
Mechanisms of synapse elimination by autism-linked genes	$240,115	University of Texas Southwestern Medical Center
Neural mechanisms underlying autism behaviors in SCN1A mutant mice	$194,903	University of Washington
Mechanisms Underlying the Cerebellar Contribution to Autism in Mouse Models of Tu	$190,458	Boston Children's Hospital
mTOR modulation of myelination	$178,659	Vanderbilt University Medical Center
Aberrant synaptic form and function due to TSC-mTOR-related mutation in autism spectrum disorders	$150,000	Columbia University
Autism phenotypes in Tuberous Sclerosis: Risk factors, features & architecture	$149,999	King's College London
A cerebellar mutant for investigating mechanisms of autism in Tuberous Sclerosis	$149,967	Boston Children's Hospital
The role of Fox-1 in neurodevelopment and autistic spectrum disorder	$145,757	University of California, Los Angeles
TrkB agonist therapy for sensorimotor dysfunction in Rett syndrome	$141,976	Case Western Reserve University
Grammatical development in boys with fragile X syndrome and autism	$141,075	University of Wisconsin - Madison
MicroRNAs in synaptic plasticity and behaviors relevant to autism	$131,220	Massachusetts General Hospital
Probing the neural basis of social behavior in mice	$125,000	Massachusetts Institute of Technology
Translational dysregulation in autism pathogenesis and therapy	$125,000	Massachusetts General Hospital
Motor cortex plasticity in MeCP2 duplication syndrome	$125,000	Baylor College of Medicine
Connections between autism, serotonin and hedgehog signaling	$124,401	Medical Research Council-National Institute for Medical Research
16p11.2 rearrangements: Genetic paradigms for neurodevelopmental disorders	$100,000	University of Lausanne
Mouse Model of Dup15q Syndrome	$84,253	Texas AgriLife Research
Phenotypic characterization of MECP2 mice	$64,742	Children's Hospital of Philadelphia
Genetic contribution to language-related preclinical biomarkers of autism	$63,513	University of Pennsylvania
Linking genetic mosaicism, neural circuit abnormalities and behavior	$62,500	Brown University
Role of GABA interneurons in a genetic model of autism	$62,500	Yale University
Characterizing 22q11.2 abnormalities	$62,498	Children's Hospital of Philadelphia
Neurobiology of RAI1, the causal gene for Smith-Magenis syndrome	$62,314	Stanford University
Cortico-striatal dysfunction in the eIF4E transgenic mouse model of autism	$61,999	New York University
TMLHE deficiency and a carnitine hypothesis for autism	$60,000	Baylor College of Medicine
Bi-directional regulation of Ube3a stability by cyclic AMP-dependent kinase	$60,000	University of North Carolina at Chapel Hill

Project Title	Funding	Institution
Testing the ribosomal protein S6 as treatment target and biomarker in autism spectrum disorders	$60,000	Cincinnati Childrens Hospital Medical Center
Physiological studies in a human stem cell model of 15q duplication syndrome	$60,000	University of Connecticut
Restoring cortical plasticity in a Rett mouse model	$60,000	Stanford University
RNA expression at human fragile X synapses	$59,217	University of North Carolina at Chapel Hill and North Carolina State University
Functional and anatomical recovery of synaptic deficits in a mouse model of Angelman Syndrome	$58,000	University of North Carolina at Chapel Hill
Investigation of protocadherin-10 in MEF2- and FMRP-mediated synapse elimination	$55,670	University of Texas Southwestern Medical Center
The role of UBE3A in autism: Is there a critical window for social development?	$54,450	Erasmus University Medical Center
Probing the Molecular Mechanisms Underlying Autism: Examination of Dysregulated Protein Synthesis	$49,300	National Institute of Mental Health (NIH)
Analysis of MEF2 in cortical connectivity and autism-associated behaviors	$49,214	Harvard Medical School
Phagocytosis is misregulated in a Drosophila model of Fragile X syndrome	$47,232	Columbia University
A novel essential gene for human cognitive function	$47,232	Harvard Medical School
Auditory cortical plasticity in a mouse model of Rett syndrome	$43,501	Cold Spring Harbor Laboratory
Pleiotropic roles of dyslexia genes in neurodevelopmental language impairments	$36,724	Yale University
Cortactin and spine dysfunction in fragile X	$32,875	University of California, Irvine
Modulation of RhoA signaling by the mRNA binding protein hnRNPQ1	$30,912	Emory University
Studying Rett and Fragile X syndrome in human ES cells using TALEN technology	$30,000	Whitehead Institute for Biomedical Research
Pragmatic language and social-emotional processing in autism, fragile X, and the FMR1 premutation	$29,474	Northwestern University
Alteration of Dendrite and Spine Number and Morphology in Human Prefrontal Cortex of Autism	$25,000	University of California, Davis
GABA and Gamma-band Activity: Biomarker for ASD?	$25,000	University of Pennsylvania
Mechanism of UBE3A imprint in neurodevelopment	$7,869	University of California, Davis
Role of astrocytic glutamate transporter GLT1 in Fragile X	$5,000	Tufts University
Elucidation and rescue of amygdala abnormalities in the Fmr1 mutant mouse model of fragile X syndrome	$0	George Washington University
Regulation of cortical critical periods in a mouse model of autism	$0	Northwestern University
The role of genetics in communication deficits in autism spectrum disorders	$0	University of Pennsylvania
Understanding the basic neurobiology of Pitt-Hopkins syndrome	$0	The University of Alabama at Birmingham
Cerebellar plasticity and learning in a mouse model of austim	$0	The University of Chicago

Project Title	Funding	Institution
A stem cell based platform for identification of common defects in autism spectrum disorders	$0	The Scripps Research Institute - California
Modeling Pitt-Hopkins Syndrome, an Autism Spectrum Disorder, in Transgenic Mice Harboring a Pathogenic Dominant Negative Mutation in TCF4	$0	University of North Carolina, Chapel Hill
Role of Serotonin Signaling during Neural Circuitry Formation in Autism Spectrum Disorders	$0	Massachusetts Institute of Technology
A Novel Glial Specific Isoform of Cdkl5: Implications for the Pathology of Autism in Rett Syndrome	$0	University of Nebraska Medical Center
Linking circuit dynamics and behavior in a rat model of autism	$0	University of California, San Francisco
Understanding the Genetic Architecture of Rett Syndrome - an Autism Spectrum Disorder	$0	Cold Spring Harbor Laboratory